FIG. 1A FORMATION OF AMORPHOUS SEMICONDUCTOR FILM

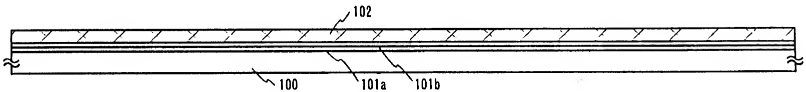


FIG. 1B FORMATION OF CATALYTIC ELEMENT CONTAINING LAYER

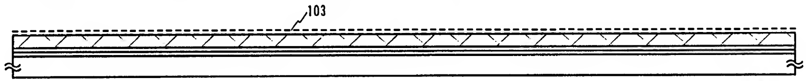


FIG. 1C HEAT TREATMENT (CRYSTALLIZATION OF SEMICONDUCTOR FILM)

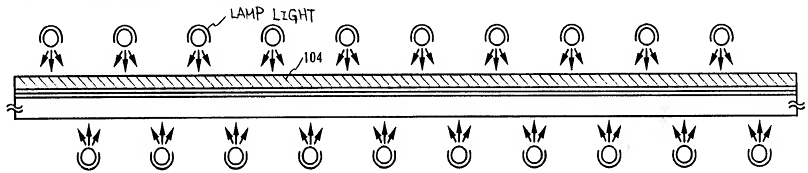


FIG. 1D LASER LIGHT IRRADIATION

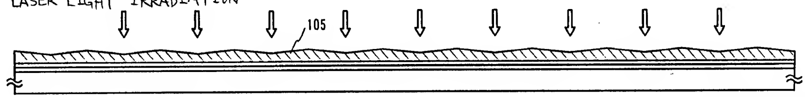


FIG.2A FORMATION OF BARRIER LAYER AND SEMICONDUCTOR FILM CONTAINING RARE GAS ELEMENT

FIG.2B HEAT TREATMENT (GETTERING)

FIG.2C REMOVAL OF BARRIER LAYER AND SEMICONDUCTOR FILM CONTAINING RARE GAS ELEMENT

FIG.2D FORMATION OF ACTIVE LAYER

FIG.3A FORMATION OF SEMICONDUCTOR LAYER/FORMATION OF INSULATING FILM/ FORMATION OF FIRST CONDUCTIVE FILM AND SECOND CONDUCTIVE FILM

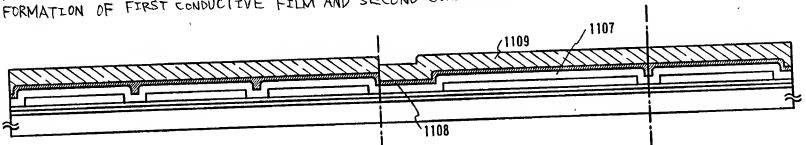


FIG.3B FIRST ETCHING PROCESS

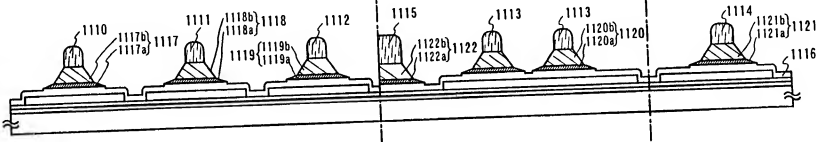


FIG.3C SECOND ETCHING PROCESS/ FIRST DOPING PROCESS

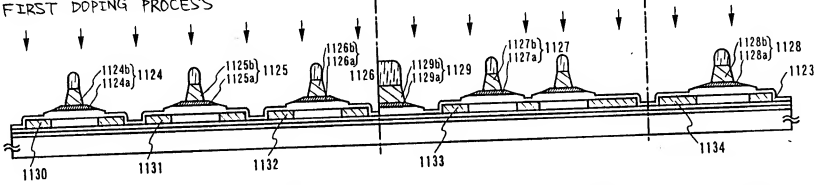


FIG.4A SECOND DOPING PROCESS

FIG.4B THIRD DOPING PROCESS

FIG.4C ACTIVATION /HYDROGENATION

2001054-011802

FIG. 5

FIG.6

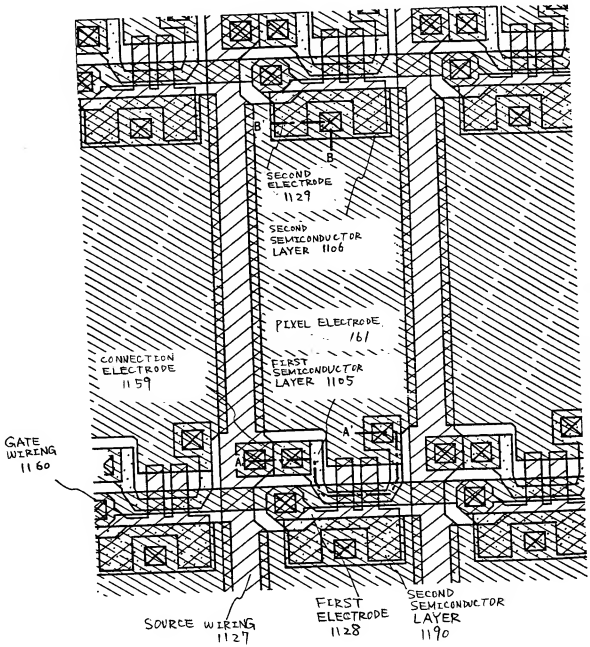

B
B'
SECOND ELECTRODE 1129
SECOND SEMICONDUCTOR LAYER 1106
PIXEL ELECTRODE 161
CONNECTION ELECTRODE 1159
FIRST SEMICONDUCTOR LAYER 1105
A
A'
GATE WIRING 1160
SOURCE WIRING 1127
FIRST ELECTRODE 1128
SECOND SEMICONDUCTOR LAYER 1190

FIG. 7A

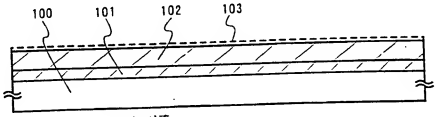


FIG. 7B

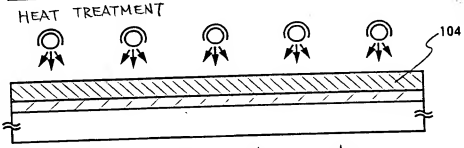


FIG. 7C

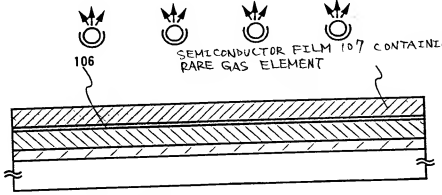


FIG. 7D

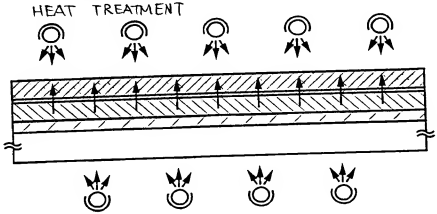


FIG. 7E

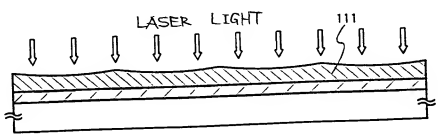


FIG.8A

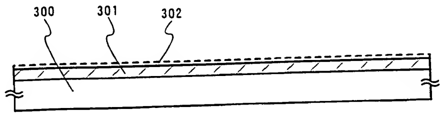


FIG.8B

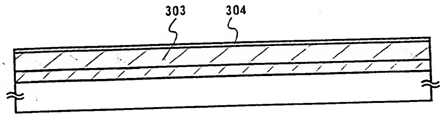


FIG.8C

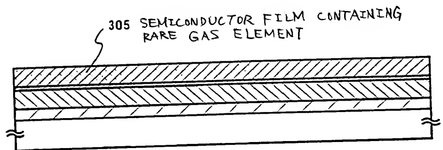


FIG.8D

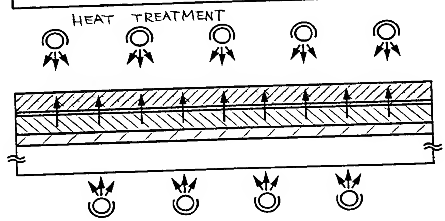
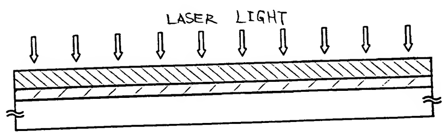


FIG.8E



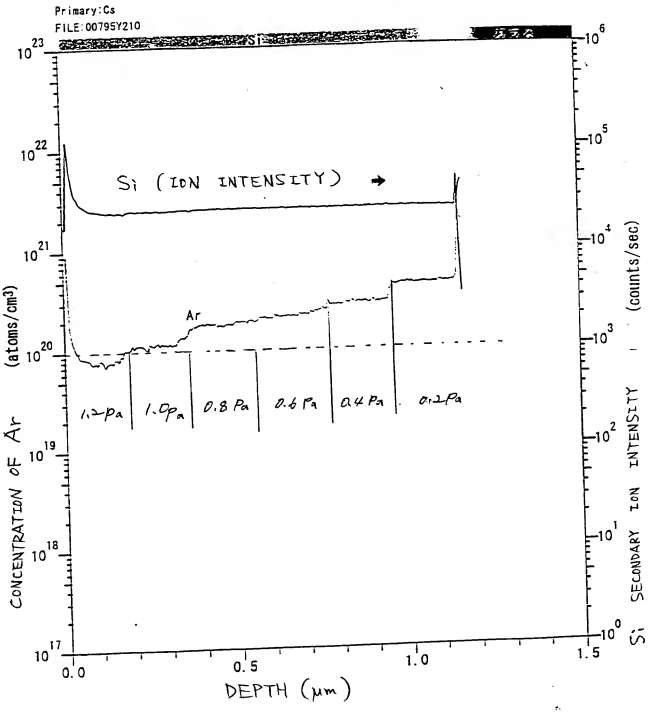
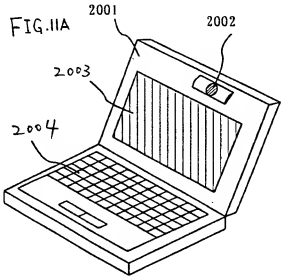


FIG.9

FIG. 10

FIG.11A



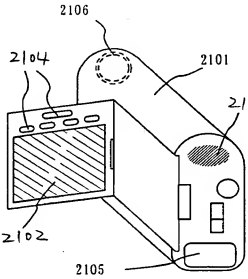


FIG.11B

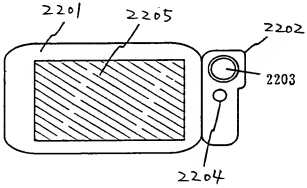


FIG.11C

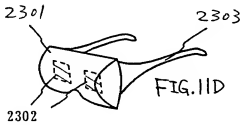


FIG.11D

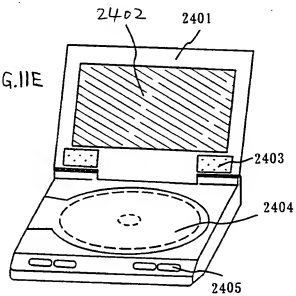


FIG.11E

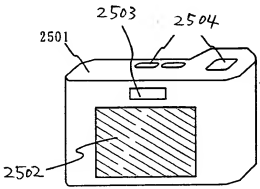


FIG.11F

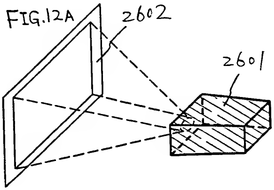


FIG.12A

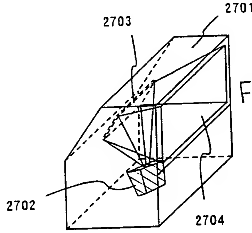


FIG.12B

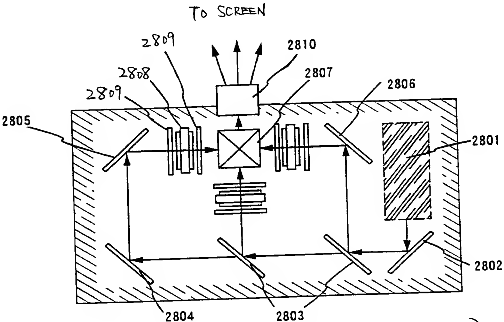


FIG.12C PROJECTION APPARATUS (THREE PLATES TYPE)

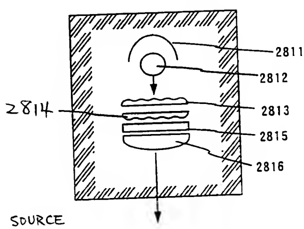


FIG.12D LIGHT SOURCE OPTICAL SYSTEM

FIG.13 A

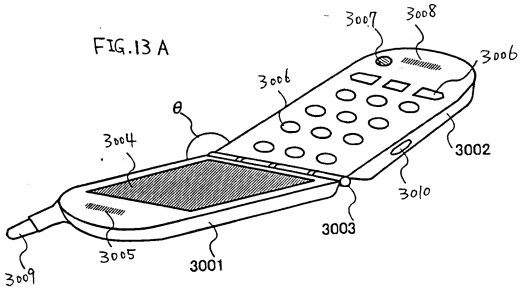


FIG.13B

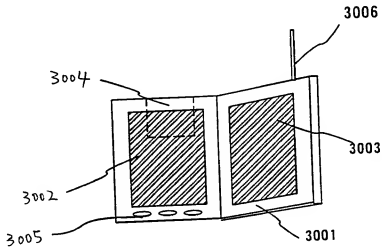


FIG.13C

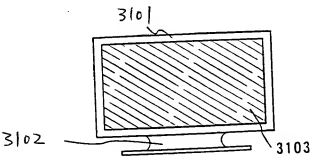


FIG.14A

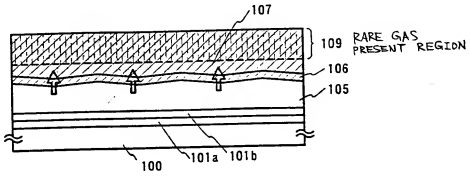


FIG.14B

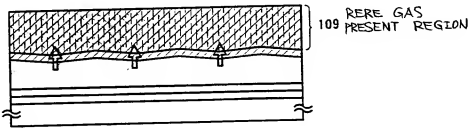


FIG.14C

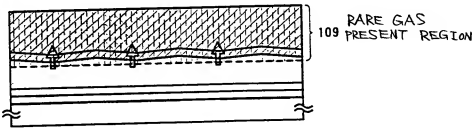


FIG.15A FORMATION OF GATE WIRING

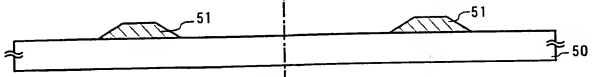


FIG.15B FORMAION OF GATE INSULATING FILM AND SEMICONDUCTOR FILM

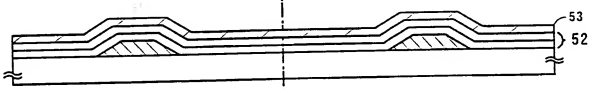


FIG.15C CRYSTALLIZATION

FIG.15D GETTERING

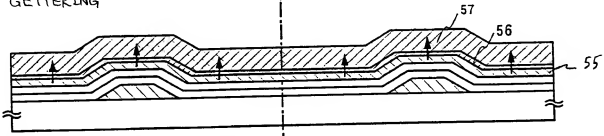
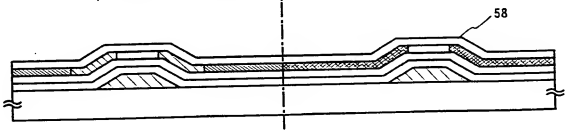


FIG.15E ADDITION OF IMPURITY ELEMENT



N-CHANNEL TFT

P-CHANNEL TFT

FIG.16A ACTIVATION

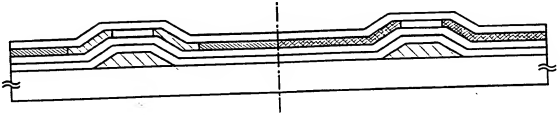


FIG.16B
FORMATION OF INTERLAYER INSULATING FILM

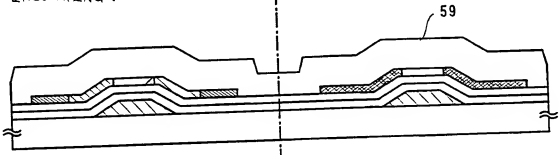


FIG.16C
FORMATION OF SOURCE WIRING AND DRAIN WIRING

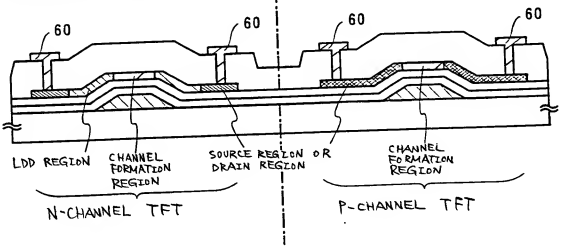


FIG.17A

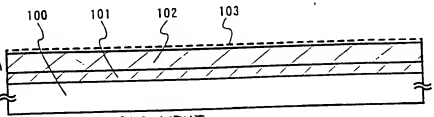


FIG.17B

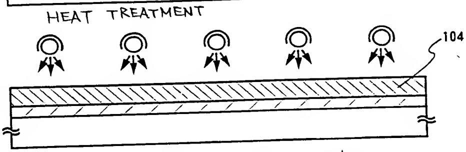


FIG.17C

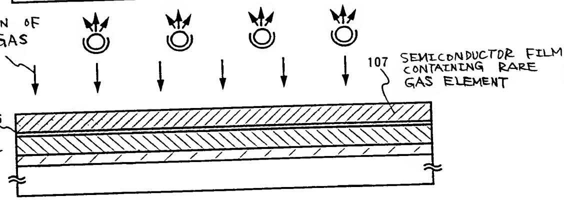


FIG.17D

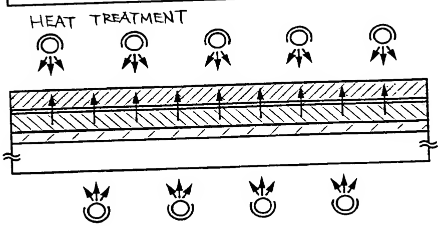


FIG.17E

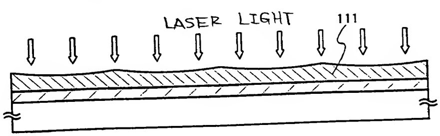
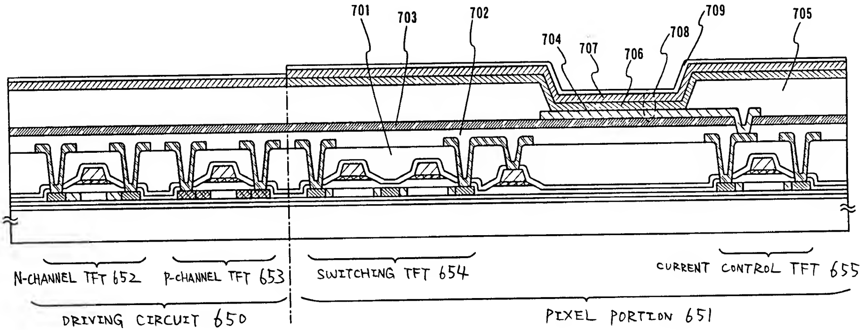


FIG.18



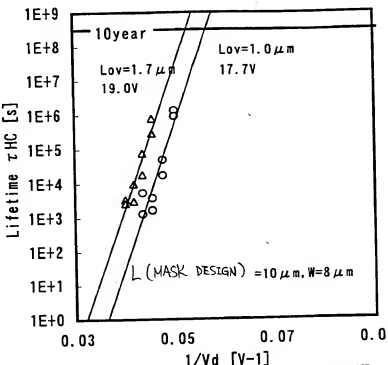


FIG.19A

ESTIMATED GUARANTEED VOLTAGE (ON CURRENT 10 % DEGRADATION) DEPENDENCE ON LENGTH OF Lov (L/W = 10/8 μm)

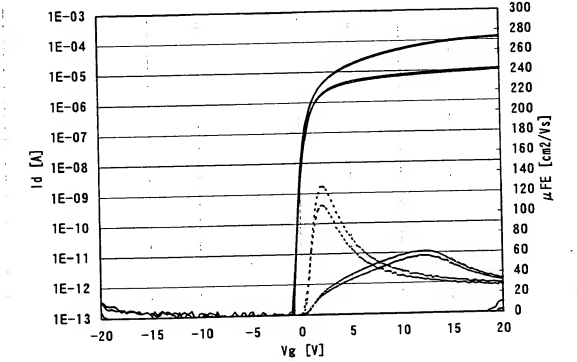


FIG.19B

STATIC CHARACTERISTIC OF PIXEL TFT (L/W = 4.5 x 2/3 μm)